

## Patent Abstracts of Japan

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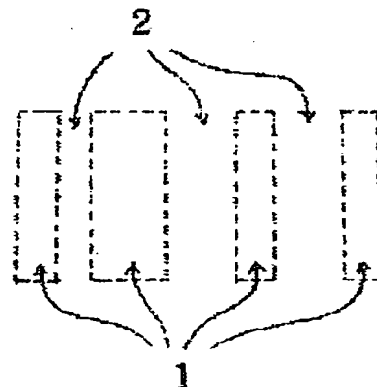
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TITLE : BAR CODE SYSTEM USING  
FLUORESCENT MATERIAL AND  
READER FOR ITS BAR CODE



ABSTRACT : PROBLEM TO BE SOLVED: To form a bar code which is 'invisible' or 'unlike' a bar code without requiring any special higher cost by using a fluorescent material for the bar code.

SOLUTION: The fluorescent material is used for the bar code 1, which is irradiated with specific exciting light emitted by the fluorescent material; and the luminescence of the fluorescent material is detected to read the bar code. There are, for example, thioflavin, fluorescein, eosin, rhodamine 6G, etc., as a ultraviolet-ray phosphor. The specific exciting light irradiating the fluorescent material is exciting light of wavelength making the phosphor luminesce and, preferably, light of infrared and ultraviolet wavelength ranges are used. Unrefined impressions on a conventional bar code can be removed and a digital bar code out of which whether or not fluorescent luminescence is present is read out is obtained to minimize read errors.

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